

## SECTION 3

The second major element of motor vehicle crashes is the vehicle. This section of the report examines the crash involvement of various vehicle types, as well as crash causes and dynamics.

The most important finding in this section is that the vast majority of motor vehicle crashes are caused by operator actions rather than vehicle equipment malfunction, roadway or other causes. In 2006, around 76% of all crashes were the result of operator actions, nearly the same proportion found in 2005. Relatively few crashes resulted from equipment malfunction (1%) while more resulted from roadway conditions (24%).

Typical causes for non-fatal crashes in 2006 are similar to those found in previous years and include failure to yield, inattention, following too closely, driving too fast for conditions and failure to keep in proper lane/off road which combined accounted for 56% of operator contributing circumstances. Contributing circumstances of the operator for fatal crashes were most frequently failure to keep in proper lane/off road (32.4%), operating vehicle recklessly (9.5%) and driving too fast for conditions (17.6%). Also, for fatal crashes hitting another motor vehicle in traffic was a frequent manner of crash at 31.2% followed by hitting a tree (20.4%), overturned vehicle (14.3%) hitting a guard rail, curb (6.5%). Close to half (42%) of all injury crashes involved colliding with another motor vehicle in traffic, 30/1 % involved hitting a guard rail/curb, tree, pole/sign, ledge/boulder or other fixed object and 11.9% overturned.

As reported in previous years, over 9 out of 10 vehicles involved in crashes are passenger cars and light trucks, which also comprise about 90 percent of vehicle registrations in Vermont. The proportion of national crashes involving passenger cars and light trucks is similar (94%) to that found in Vermont. Passenger car (33.2) and light truck (34.2) crash rates were considerably higher than those for large trucks (23.1) and motorcycles (7.0) in 2006, however, the rate of fatal crashes was the greatest for motorcycles (.28) followed by large trucks (.26). The fatal crash rates for passenger cars (.12), light trucks (.14) increased, while the fatal crash rates for motorcycles decreased.

The number of vehicles involved in crashes varies by the type of crash. In 2006, property damage only crashes involved multiple vehicles 71% of the time, while injury crashes involved multiple vehicles 47% of the time, similar to findings in previous years. Fatal (61%) and injury (57%) crashes were more likely to involve a single vehicle than property damage crashes (29%). Additionally, the most frequent manner of crashes for passenger vehicles in multiple vehicle crashes in 2006 were rear-end (38%) and angle collision, turning (35.2%). For non-collision crashes, overturning and hitting a fixed object were a frequent manner of crash for passenger cars, sport utility vehicles, light trucks, or large trucks.